

Automatic Regulating and Control (Cont.)

SOV/3317

mechanisms, are also explained. Some considerations regarding possible ways of automating butt welding in a random direction are presented. The authors of this collection are all instructors in the department of "Automation and Remote Control" at MVTU imeni Bauman. The articles are based on scientific research work conducted by the department during the last five years. Some personalities are mentioned in each article. References are given after each article.

TABLE OF CONTENTS:

- Ulanov, G.M., Doctor of Technical Sciences. Development of the Invariancy Principle and of the Theory of Combined Systems of Regulation and Control 5
- According to the author, the theory of invariancy constitutes the basis of the theory of combined automatic systems which depend on two principles:
- 1) regulation and control as a function of deviation;
 - 2) regulation and control as a function of load. Mathematical problems of invariancy were developed in the Soviet Union by N.N. Luzin and P.I. Kuznetsov in 1945-1946. In 1948 Academician V.S. Kulebakin established conditions of invariancy with an accuracy up to the free component. Professors A.G. Ivakhnenko,

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Automatic Regulating and Control (Cont.)

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A.J. Kukhtenko and other Ukrainian scientists contributed much to the advancement of the theory and methods of developing combined systems of automatic regulation and control. A tendency to unite the problems of combined systems and of self-adjusting systems appears in the works of V.V. Solodovnikov and A.M. Batkov (1956). The author summarizes the basic ideas of the Soviet scientists on the above problems.

14

Bibliography

Shramko, L.S., Candidate of Technical Sciences. Problem of Self-adjusting Systems

15

The author investigates some a-c systems which develop an error signal of the type $U_e(t) \cos \omega t$. This signal, amplified and converted accordingly, is used for the control of certain actuating units (frequently, two-phase induction motors). There are two ways of converting this error signal:

- 1) with demodulation preceding the conversion of the a-c signal;
- 2) without intermediate demodulation

The author considers systems of the second type the more advantageous because of the absence of additional demodulating and modulating devices.

Card 3/7

SHRAMKO, L. S.

ALEKPEROV, V.P., inzh.; ATOVMYAN, I.O., inzh.; ZUYEV, V.I., inzh.; KAVUN, Ye.S., kand.tekhn.nauk; KOGAN, B.Ya., kand.tekhn.nauk; KOPAY-GORA, P.N., kand.tekhn.nauk; KULAKOV, A.A., inzh.; LEBEDEV, A.N., kand.tekhn.nauk; PAPERNOV, A.A., doktor tekhn.nauk; PEL'POR, D.S., doktor tekhn.nauk; PLOTNIKOV, V.N., kand.tekhn.nauk; RUZSKIY, Yu.Ye., kand.tekhn.nauk; SOLODOVNIKOV, V.V., doktor tekhn.nauk; TOPCHEYEV, Yu.I., kand.tekhn.nauk; ULANOV, G.M., kand.tekhn.nauk; SHRAMKO, L.S., kand.tekhn.nauk; DOBROGURSKIY, S.O., doktor tekhn.nauk, retsenzent; KAZAKOV, V.A., kand.tekhn.nauk, retsenzent; PETROV, V.V., kand.tekhn.nauk, retsenzent; KHAVKIN, G.A., inzh., retsenzent; SOLODOVNIKOV, V.V., prof., doktor tekhn.nauk, red.; VITENBERG, I.M., kand.tekhn.nauk, nauchnyy red.; MOLDAVER, A.I., kand.tekhn.nauk, nauchnyy red.; KHETAGUROV, Ya.A., kand.tekhn.nauk, nauchnyy red.; POLYAKOV, G.F., red.izd-va; KONOVALOV, G.M., red.izd-va; SOKOLOVA, T.F., tekhn.red.

[Fundamentals of automatic control] Osnovy avtomaticheskogo regulirovaniya. Vol.2. [Elements of automatic control systems] Elementy sistem avtomaticheskogo regulirovaniya. Pt 2. [Compensating elements and computer components] Korrektiruyushchie elementy i elementy vychislitel'nykh mashin. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit.lit-ry. 1959. 453 p. (MIRA 12:4)
(Automatic control) (Electronic apparatus and appliances)
(Electronic calculating machines)

SHRAMKO, L.S., kand.tekhn.nauk

Self-adaptive systems. [Trudy] MVTU no.97:15-22 '59.
(Automatic control) (MIRA 13:5)

SOLODOVNIKOV, V.V., doktor tekhn.nauk, prof.; SHRAMKO, L.S., kand.tekhn.
nauk, dotsent

"Fundamentals of the automation of technological processes" by
M.Maizel'. Reviewed by V.V.Solodovnikov, L.S.Shramko. Kozh.-
obuv.prom. 3 no.9:37 S '61. (MIRA 14:11)
(Automation) (Maizel', M.)

L 41426-65

ACCESSION NR: AT5009741

UR/0000/65/000/000/0342/0353

4
B+1

AUTHOR: Shramko, L. S.; Chebyshev, A. V.

TITLE: Design of analytic adaptive systems using continuously acting elements

SOURCE: Analiticheskiye samonastroyayushchiyesya sistemy avtomaticheskogo upravleniya (Analytical adaptive control systems). Moscow, Izd-vo Mashinostroyeniye, 1965, 342-353

TOPIC TAGS: analytical adaptive system, continuously acting element, gradient method adaptation, fast adaptive system, multiparameter adaptive system

ABSTRACT: The shortness of the adaptation time is one of the main advantages of analytical adaptive systems. While sampling systems using the gradient method have an adaptation time several times longer than the duration of the transient process, systems computing the components of the gradient exhibit an adaptation time whose order of magnitude is the same as the duration of the transient. Theoretical and experimental investigations (on a two-parameter prototype utilizing a two-phase asynchronous motor) confirmed the feasibility of adaptation by means of internal signals operating within the system. This eliminates the

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L 41426-65

ACCESSION NR: AT5009741

need for auxiliary probing signals, i.e., removes the additional necessary but unwanted perturbations. The gradient method with component evaluation permits the design of adaptive systems tuned simultaneously by several parameters. The article concludes with a brief comment concerning the practical realization of adaptive systems of the type described. Orig. art. has: 8 formulas, 11 figures, and 2 tables..

ASSOCIATION: None

SUBMITTED: 15Dec64

ENCL: 00

SUB CODE: IE

NO REF SOV: 002

OTHER: 000

file
Card 2/2

SHILKO, N. P., ^{Quil}Master Med Sci— (also) "The metamorphology of the Artyus-Sakharov
allergic reaction of the skin and liver to the depression and irritation of the
nervous system. (Experimental research). Odesa, 1957, 15 pp. (Odesa State Med
Med Inst im. N. I. Pirogov), 200 copies.
(KL, No 40, 1957, p. 96)

SHRAMKO, N.P.

Case of ascarids immobilized in the esophagus. Med.paraz. i paraz.
bol.supplement to no.1:74-75 '57. (MIRA 11:1)

1. Iz kafedry patologicheskoy anatomii Vinnitskogo meditsinskogo
instituta
(ASCARIDS AND ASCARIASIS)

SHRAMKO, N.P., RYBINNIK, I.M.

Anuria caused by thrombosis of the renal artery. Urologia
23 no.5:62-63 S-O '58 (MIRA 11:11)

1. Iz kafedry patologicheskoy anatomii (zav. - dotsent N.V. Konstanti-
novich) Vinnitskogo meditsinskogo instituta i urologicheskogo
otdeleniya (zav. I.M. Rybinnik) Vinnitskoy oblastnoy bol'nitsy
(nauchnyy rukovoditel' - dotsent M.V. Pinevich).

(ANURIA, etiology & pathogenesis
thrombosis of renal artery (Rus))

(KIDNEYS, blood supply
thrombosis of renal artery causing anuria (Rus))

(THROMBOSIS, case reports
renal artery, causing anuria (Rus))

SHRAMKO, N.P., kand.med.nauk (Vinnitsa, ul.1 Maya, d.140)

Hemorrhagic gangrene of the entire small intestine due to tuberculous
pylethrombosis. Nov. khir. arkh. no.4:99-101 J1-Ag '61.

(MIRA 15'2)

1. Kafedra patologicheskoy anatomii (zav. - doktor med.nauk
N.V.Konstantinovich) Vinnitskogo meditsinskogo instituta.
(VEINS__TUBERCULOSIS) (INTESTINES__DISEASES)

KONSTANTINOVICH, N. V., prof.; GOMENYUK, I. P., kand. med. nauk;
SHRAMKO, N. P., kand. med. nauk; ZHABIN, V. I., dotsent

Frequency of metastases of uterine cancer into the ovaries.
Akush. i gin. 38 no.3:74-78 My-Je '62. (MIRA 15:6)

1. Iz kafedry patologicheskoy anatomii (zav. - prof. N. V. Konstantinovich) i kafedry akusherstva i ginekologii (zav. - prof. M. K. Ventskovskiy) Vinnitskogo meditsinskogo instituta imeni N. I. Pirogova.

(UTERUS—CANCER) (OVARIES—CANCER)

SHRAMKO, O.S. (Rostov-na-Donu).

Using models in arithmetic classes of grades 5 and 6. Mat. v shkole
no.2:59-64 Mr-Apr '58. (MIRA 11:2)

(Arithmetic--Study and teaching)

SHRAMKO, O.S. (Rostov-na-Donu)

Teaching mathematics in grades five and six. Mat. v shkole
no.3:11-13 My-Je '62. (MIRA 15:7)
(Mathematics—Study and teaching)

DANILOV, V.I.; KRUGLYAK, Yu.A. [Kruhliak, IU.O.]; TOLPYGO, I.B. [Tolpyho, K.B.];
SHPAMEO, O.V.

Statistical analysis of a protein text. Dop. AN URSS no. 5:627-630
'65. (MIRA 18:5)

1. Institut fizicheskoy khimii AN UkrSSR.

SHKOLNIK, I.I.; BRUGLYAK, Yu.A.

1. Electron structure of rare pairs of bases of DNA and the mechanism of spontaneous mutations connected with tautomerism of bases. Biofizika 10 no.4:561-566 '65. (MIRA 18:8)

1. Institut fizicheskoy khimii im. I.V. Piskarshevskogo AN UkrSSR, Kiev.

DANILOV, V.I.; TOLPYGO, K.B.; SHRAMKO, O.V.

Redundancy and error-resistance of the code of protein synthesis.
Dokl. AN SSSR 163 no.5:1282-1284 Ag '65.

(MIRA 18:8)

L. Institut fizicheskoy khimii im. L.V.Pisarzhevskogo AN UkrSSR.
Submitted October 8, 1964.

KRUGLYAK, Yu.A.; DANILOV, V.I.; SHRAMKO, O.V.

Systems of nucleic acid base pairings. Biofizika 10 no.3;
399-403. '65. (MIRA 18:11)

1. Institut fizicheskoy khimii imeni Pisarzhevskogo AN UkrSSR,
Kiyev. Submitted July 28, 1964.

ANILIN, V.I.; KRUGLYAK, Yu.A.; TYL'VGO, K.B.; SHRAMKO, O.V.

Correlation between adjacent amino acid radicals in proteins.
Dokl. AN SSSR 160 no.5:1191-1193 F '65.

(MIRA 18:2)

1. Institut fizicheskoy khimii im. L.V. Pisarzhevskogo AN UkrSSR.
Submitted June 4, 1964.

SHENKOV, P. K.

SHENKOV, P. K. - "Search for Methods of Lowering the Output of Tangled Fibers in the Operation of the Combing Apparatus in the LK-7 Flax Combine." Min of Higher Education USSR, Leningrad Agricultural Inst, Leningrad, 1955 (Dissertations for Degree of Candidate of Technical Sciences)

SO: Knizhnaya Letopis' No. 26, June 1955, Moscow

SHRAMKO, P.P.)

Phosphorites in the northwestern Donets Basin. Geol. zhur. 20
no. 3:79-81 '60. (MIRA 14:4)
(Donets Basin--Phosphorites)

SHRAMKO, P.P.; LEPCHENKO, G.Ya. [Lepchenko, H.IA.]

Dynamogranite and its enclosing rocks in the Delovoye region of
Transcarpathia. Geol. zhur. 20 no. 5:56-60 '60. (MIRA 14:1)
(Transcarpathia—Granite)

L 52093-65 EWT(d)/EWT(1)/FA/T-2/EWP(1) Pg-4/Pk-4/Pl-4/Po-4/Pq-4/IJP(c)
 ACCESSION NR: AP5015356 BC UR/0286/65/000/009/0100/0100
 621-576

AUTHOR: Chelishchev, B. A.; Shramko, V. D.; Kokorev, V. I.

TITLE: A pneumohydraulic servomechanism. Class 42, No. 170779

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 100

TOPIC TAGS: automatic control, pneumatic control, pneumatic device

ABSTRACT: This Author's Certificate introduces a pneumohydraulic servomechanism. The device contains a piston-type pneumatic servomechanism and a piston-type hydraulic damper. The damper rod is rigidly connected to the rod of the pneumatic servo. High speed operation is provided by mounting two check valves, two fixed chokes and a single-aperture symmetric slide valve in the line which connects the hydraulic damper chambers. The symmetric slide valve is rigidly connected with two diaphragms. The chambers above these diaphragms are connected by pneumatic lines with the slide valve of the pneumatic servomechanism. This valve has two auxiliary collars which are offset with respect to the valve apertures with negative exhaust overlap and positive intake overlap.

Card 1/2

L 52093-65

ACCESSION NR: AP5015356

ASSOCIATION: Eksperimental'nyy nauchno-issledocatel'skiy institut kuznechno-pressovogo mashinostroyeniya (Experimental Scientific Research Institute of Forging Machine Building)

SUBMITTED: 12Aug63

ENCL: 00

SUB CODE: DP, IE

NO REF SOV: 000

OTHER: 000

BSB
Card 2/2

L 14445-66 EWT(d)/EWP(h)/EWP(l)

ACC NR: AP6002966

SOURCE CODE: UR/0286/65/000/024/0134/0135

INVENTOR: Chelishchev, B. A.; Shramko, V. D.; Kokorev, V. I.

ORG: none

14.55 31
B
TITLE: A manipulator for holding and transferring workpieces. Class 49, No. 177256
[announced by the Experimental Scientific Research Institute for Construction of
Stamping and Forging Machines (Eksperimental'nyy nauchno-issledovatel'skiy institut
kuznechno-pressovogo mashinostroyeniya)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 134-135

TOPIC TAGS: material handling, remote handling equipment, pneumatic servomechanism

ABSTRACT: This Author's Certificate introduces a manipulator for holding and transferring workpieces. The device contains a stand made in the form of a column which is connected to the tong assembly through a system of hinged levers, e.g. by vacuum suction devices equipped with a pneumohydraulic servodrive and a pneumatic programmed remote control system. The manipulator is designed for picking up and transferring workpieces to any point within its servicing radius and orienting them in the proper

Card 1/3

UDC: 621.86.062

L 14445-66

ACC NR: AP6002966

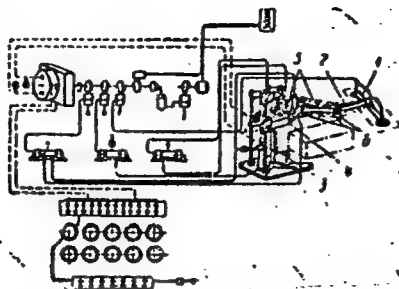
position. The tong assembly is connected by levers to a transverse member mounted in the column so that it can be moved in the vertical direction. The lever system is equipped with a chain drive with sprockets mounted on the hinged axles in the system. These sprockets may be used for individual control of each lever and for orienting the tong assembly in the proper position.

SUB CODE: 13/ SUBM DATE: 27Dec63

Card 2/3

L 14445-66

ACC NR: AP6002966



1 - tong assembly; 2 - levers; 3 - column; 4 - transverse member; 5 - chain drive; 6 - sprocket.

Card 3/3

ALEKSEYEV, Ya.K. (g. Nizhnedneprovsk); PETRUSHEVSKIY, A.P. (g.Nizhnedneprovsk);
SHRAMKO, V.I. (g. Nizhnedneprovsk).

Labor upswing. Put' i put. khoz. no.2:29 P '59. (MIRA 12:3)

1.Nachal'nik Nizhnedneprovskogo strelochnogo zavoda, g.Nizhnedneprovsk (for Alekseyev). 2.Glavnyy inzhner Nizhnedneprovskogo strelochnogo zavoda (for Petrushevskiy). 3.Glavnyy tekhnolog Nizhnedneprovskogo strelochnogo zavoda (for Shramko)
(Nizhnedneprovsk--Railroads--Switches)

SHRAMKO, V. L.

23560. LESORAZGRUZOCHNAYA USTANOVKA. (RAZGRUZKA OTKRYTYKh Zh-D VAGONOV).
MEKHANIZATSIYA STROIT- VA, 1949, No 7, c. 18.

SO: LETOPIS' NO. 31, 1949

SHRAMKO, V.L. (Dneporpetrovsk)

Dnepropetrovsk switch factory adapts its production railroad workers' needs. Put' i put.knoz. 4 no.9:40-41 S '60. (MIRA 1369)

1. Glavnyy inzhener Dnepropetrovskogo strelochnogo zavoda.
(Dniepropetrovsk--Railroads--Switches)

SHRAMKO, V. I.

Small pneumatic tamping iron. Mashinostroitel' no. 11:17 N '60.
(MIRA 13:10)

(Pneumatic tools)

SHRAMKO, V.L.

We manufacture high-strength switches. Put' i put.khoz.
5 no.7:24 J1 '61. (MIRA 14:8)

1. Glavnyy tekhnolog Dnepropetrovskogo strelochnogo zavoda,
g. Dnepropetrovsk.
(Dnepropetrovsk--Railroads--Switches)

SHRAMKO, V.V.

Ash content of coal has been reduced 3.5 times. Ugol' Ukr. 3 no.2:36
F '59. (MIRA 12:3)

1. Glavnyy mekhanik shakhty No. 30 tresta Rutchenkovugol'.
(Coal mines and mining)

MITKEVICH, A.V.; SHRAMKO, Ye.G.

Study of the stability of magnetic systems with magnets within their frameworks and determination of their temperature coefficients. Elektrichestvo no.1:69-72. Ja 1972. (NIRA 14:12)

1. Leningradskiy politekhnicheskii institut imeni Kalinina.
(Magnetic circuits)
(Magnetic instruments)

SHRAMKO, Yu.

Let us disseminate technical knowledge among young people. Za rul.
20 no.3:1-2 Mr '62. (MIRA 15:3)

1. Zaveduyushchiy otделom Tsentral'nogo komiteta Vsesoyuznogo
Leninskogo kommunisticheskogo soyuza molodezhi.
(Technical education)

ROZHANSKIY, Z.Ye., inzh.; SHRAMKO, Yu.S., tekhnik

Protective circuit using two IT-85 (86) relays and one isolating
coil for the prevention of interphase short-circuits. *Energetik* 8
no.8:25-26 Ag '60. (MIRA 13:10)
(Electric relays) (Electric protection)

ROZHANSKIY, Z.Ye.; SHRAMKO, Yu.S.; FEDORENKO, F.A.; LYSIKOV, A.N.

Central signaling networks using telephone relays with overlapping
contacts. Prom.energ. 16 no.11:33-34 N '61. (MIRA 14:10)
(Electric networks) (Electric relays)

ROZHANSKIY, Z.Ye., inzh.; SHRAMKO, Yu.S., teknik; ZAIKA, N.V., teknik;
YAROSH, Yu.V., teknik; ARONSON, V.R., teknik

An impulse signaling device using transistors. Energetik 10
no.12:17-19 D '62. (MIRA 16:1)
(Electric relays) (Electric networks)

L 40647-66 EWT(1)

ACC NR: AP6009935

SOURCE CODE: UR/0118/65/000/011/0022/0023

AUTHOR: Piskunov, Yu. N. (Engineer); Shramko, Yu. S. (Engineer) 37
B

ORG: none

TITLE: A semiconductor multi-circuit time relay 25

SOURCE: Mekhanizatsiya i avtomatizatsiya proizvodstva, no. 11, 1965, 22-23

TOPIC TAGS: time relay, circuit design, transistorized circuit

ABSTRACT: The authors propose a simple time relay for the control of processes, requiring alternate switching-on with a time-interval accuracy of not more than $\pm 10\%$. The relay consists of a master oscillator, three frequency dividers, and a decoding unit to the output of which are connected time-sensor switches (designed to operate on a second, minute, and hour basis). The minimum time delay is 5 sec and the oscillation period of the multivibrator is 2.5 sec. The decoder is used to transform the binary code reading provided by the counter arrangement into the decimal code. Semiconductors of type P-16, P-13, and D9D (diode) are used in the relay. Collector circuits are fed with a voltage of 12 v received from a transistorized voltage stabilizing network. Bias circuits are driven by + 5 volts. The time relay was manufactured and has been operating in the laboratories of UKRNNIKhIMMASH since 1962.

Card 1/2

UDC: 621.318.7

L 40847-66

ACC NR: AP6009935

Orig. art. has: 1 figure and 1 table.

SUB CODE: 09/ SUBM DATE: 00/ ORIG REF: 000/ OTH REF: 000

Card 2/2 *MLP*

PISKUNOV, Yu.N., inzh.; SHRAMKO, Yu.S., inzh.

Electronic relay with a thyatron for controlling the completion
of filtrate outflow. Mekh. i avtom.proizv. 19 no.2:29-30 F '65.
(MIRA 18:3)

SHRAMKOV, A.Ya., inzhener.

Taking into account the correction term in a double bridge equation.
Elektrichestvo no.6:72 Je '53. (MLRA 6:7)

1. L'vovskiy politekhnicheskii institut. (Electric circuits)

KARANDEYEV, K.B., professor; SHRAMKOV, A.Ya., inzhener.

Rectifying watt-meters. Elektrichestvo no.12:44-47 D '53.

(MIRA 6:11)

1. L'vovskiy politekhnicheskii institut.

(Wattmeter)

SHRAMOV, A.Ya.

Electromagnetic wattmeter. Nauch. zap. IMA AN URSR. Ser. avtom. i
izm. tekhn. 4:111-119 '55. (NLRA 10:8)

(Wattmeter)

SERAMKOV, A.Ya.

Experimental investigation of electromagnetic wattmeters.

Avtom. kont. i izm. tekhn. no. 1:74-78 '57.

(MIRA 11:6)

(Wattmeter)

SHRAM Kev. A. V. A.

FALSE X BOOK EXPLOITATION

8007/AD08

Академия наук Украинской ССР. Институт электротехники

Voprosy obshchego elektromekhanizma (Overall Problems of the Electric Instrument Industry) El'yev, 1960. 262 p. 5,000 copies printed.

Add it to the local Spool Sorting Agency! Machine-to-machine storage of alternative print formats isn't boy-provable anymore. It's a machine-to-machine provable reality.

Editorial Board: A. D. Maslennikov, Corresponding Member, Academy of Sciences USSR, *Uralian Branch*, M. I. Lavit, Doctor of Technical Sciences, P. P. Grachevsky, Candidate of Technical Sciences, V. P. Petrovichko, Candidate of Technical Sciences, A. Y. Goryunovskiy, Engineer, S. Sh. Zaslavskiy, Engineer, and B. A. Balderov, Doctor of Publishing House: B. A. Kabanov, Tchaik. M. I. Yefimov.

HYPKES: This book is intended for technical personnel working in the field of electric measurement techniques, in electrical instrument plants, in laboratories of electric power systems and in electric measurement laboratories of a plant.

CONCLUDE: This is a collection of reports presented at a conference on the overall development of the Soviet electrical instrument industry held in L'vov on October 27-29, 1956. The conference was convened by the Institute of Electrical Machines at URSI (Institute of Electrical Engineering, Academy of Sciences of the USSR) and the Ukrainian republicans previously and photoelectric industry (Ukrainian Republic Administration of RMO of the Instrument-making Industry). Problems relating to electrical instrument-making as a whole (reports by A. B. Melnikova, P. P. Onatskiy, L. B. Artyukh, Ye. O. Shmarovskiy) were discussed, as well as problems relating to the development of reference instruments (A. B. Artyukh, I. K. Zhukovskiy), the automation of electrical-measuring circuits (A. Ya. Shtromov, I. N. Mykhailov) and to the theory and practice of magnetic measurements (B. M. Shol'skiy, O. G. Gontsareva). Attending the conference were workers of scientific research institutes and schools of higher education, along with representatives of the main scientific instrument plants ("Vuztek" in L'vov, "Nobelskriptor" in Kyiv, "Obolshchinskoye" in Gosty, ZIF in Kremenchuk and others) and of various electrical power systems. No personalities were mentioned. References are contained in the reports.

References^{2,3} 1. New materials for sheetpiling
The author recommends alloys of platinum with 20% Ag and 6-7% Ni
as material for sheetpiling. There are 6 references: 3 English,
1 German and 2 Soviet.

Abstract V. S. and A. B. Poryvay. Induction Voltage Divider. The authors recommend the manufacture of induction voltage dividers by electric measurement plants.

The author lives at 6000 E. 9th St., Tulsa, Okla. 74117.

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from the point of view of their usefulness in working conditions when measuring small end's of power sources characterized by a linear or essentially changing internal resistance. There are 10 references: 3 Soviet and 2 German.

~~Report on the~~ Reconnaissance river at the help of Beaver-Type
Boatsmen

in which an S-shaped device was developed, designed, produced and tested. The device was based on a structure consisting of a tungsten filament and a nichrome heater placed in a glass insulating tube. The authors demonstrated the physical law, the basis of which is a characteristic of static power converters. There are 3 references: 2 Soviet and 1 English.

Shimakov, A. Ya. Automatic Device With Digital Reading of Differencing on the Fact that in the ... 257

have been produced by more than 100 different countries (1974). These types of computers are found in a wide distribution in industry. In the USSR, very little is done in this field, although a little Soviet technical literature on this problem exists. The authors are developing an electrical-control type of digital device with automatic balancing and decimal count. The device would serve as a calculation measuring of various electrical quantities (voltage, current, resistance, etc.). A description of the device is included. There are 7 references: 1 Soviet, 1 Polish, 1 German, 1 Japanese, and 3 English.

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DATE 12/12

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11-15-00

KIRIANAKI, N.V.; OBOZOVSKIY, S.S.; SHRAMKOV, A.Ya.

Classification of digital electromechanical measuring devices.

Avtom.kont.i elek.izm. no.1:47-54 '60.

(MIRA 15:2)

(Electric measurements)

(United States--Electric measurements)

SHRAMKOV, A.Ya.

Compensation of the temperature dependence of e.m.f. in regular
cells used in potentiometers. Izv.tekh. no.9:33-35 S '60.

(MIRA 13:9)

(Potentiometer)


S/263/62/000/011/016/022
1007/1207

AUTHOR. Boris, Ya. V. and Shramkov, A. Ya.

TITLE: Device for measuring the time constant of precision resistances

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. 32. Izmeritel'naya tekhnika, no. 11, 1962, 47-48, abstract 32.11.359. "Nauchn. zap. L'vovsk. politekhn. in-t.", no. 79, 1961, 104-108

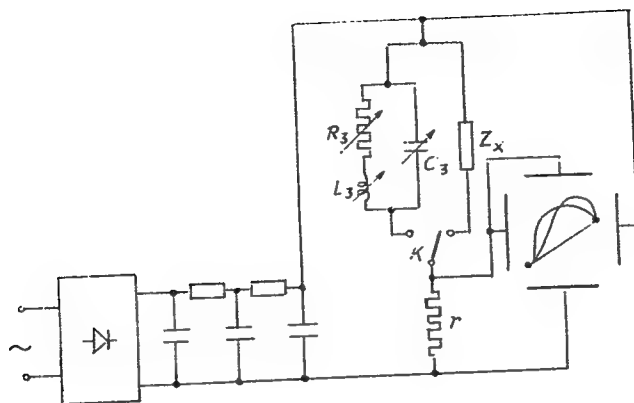
TEXT: The time constant of resistances can be measured and directly read by comparing the curves of transient processes developing in reference and tested resistances under the action of equal, rectangular voltage-wave pulses. The current-intensity curve, when subjected to such voltage pulses, does not repeat the shape of voltage curves but varies according to a certain definite law determined by the relationship between the coil parameters R, L and C. The voltage to the measuring device is fed (see figure) from the last capacitor of a two-section filter. The selection of the proper time constant for capacitor charging and discharging ensures a rather complete recovery of the capacitor voltage during disconnection of the circuit by means of the key K, and an almost complete discharge of the capacitor on closing the circuit. The shape of the curve reproduced on the screen of the device, makes it possible to infer the capacitive or inductive nature of the reactance to be measured. The connecting frequency of the switch is raised to 250-500 cps. At a valve sensitivity of 0.25 mm/v, the error in determining the values of L and C does not exceed 2-3%. Changes in both inductance variometer and variable capacitor are recorded on the screen with an accuracy of 1%. The circuitry of the



Card 1/3

Device for measuring the...

S/263/62/000/011/016/022
1007/1207



[Abstracter's note. Complete translation.]

Card 2/3

Device for measuring the...

S/263/62/000/011/016/022
I007/I207

device has no amplifying system. The pulsating feeding of the device to be tested permits the voltage to be selected at relatively high values (up to 200 v or even more) so that the current, induced in the resistance, does not exceed 0.1 to 0.5 v. Measurements by means of the described device are carried out in the following way: inductance L and capacitance C are first set at zero. Tuning of resistance R ensures the coincidence of two points corresponding to the end of the transient process. Next L and C are tuned to give coincidence of the lines connecting the starting and end points. The time constant is finally found from the formula

$$\tau = \frac{L}{R} - CR$$

The device permits the measurement of the time constant over a range from 1.10^{-5} sec to 1.10^{-7} sec for several bands corresponding to resistances varying from 0.1 to 100,000 ohm.

Card 3/3

S/880/61/000/079/004/011
E194/E455

AUTHORS: Karandeyev, K.B., Shramkov, A.Ya., Krasilenko, V.A.
TITLE: The use of nonlinear resistances in automatic self-balancing bridges
SOURCE: Lvov. Politekhmichnyy institut. Nauchnyye zapiski.
no.79. Voprosy elektroizmeritel'noy tekhniki. no.1.
1961. 98-103

TEXT: The object of the work was to develop a self-balancing bridge for temperature recorders and similar devices which should be as simple and reliable as possible, avoiding the customary use of a motor-driven rheostat as the balancing device in one arm of such bridges. One arm is the resistance to be measured, which may be a pick-up;; another comprises an incandescent lamp filament: the remaining two arms are constant resistances selected to suit the bridge operating conditions. Feed-back is provided between bridge input and output. A small bridge-operating input voltage, insufficient to affect the lamp resistance, gives an out-of-balance output voltage which is amplified and applied to the bridge input together with the low operating-voltage. This heats the lamp so
Card 1/3

The use of nonlinear ...

S/880/61/000/079/004/011
E194/E455

that its resistance is increased and the bridge approaches balance, but there will always be sufficient out-of-balance to maintain current through the lamp. This, of course, depends on the resistance of the pick-up or other object measured. Thus the input voltage from the amplifier is a measure of the pick-up resistance and can be measured by a suitable meter. The out-of-balance required to keep the bridge in the equilibrium position should be as small as possible, certainly not more than 0.2 to 0.3 of the principal error of the instrument. For example, when the out-of-balance is 0.1% the amplification factor should be at least 4000. The bridge operating-voltage should be about 100-th of the amplifier output voltage to ensure that it does not affect the lamp filament temperature. In a bridge using a low-voltage incandescent lamp (1 V, 75 mA), the amplifier amplification was 14000, the thermometer resistance ranged from 100 to 300 ohms and the other bridge components had stated values. The relationship between the pick-up resistance and the meter reading (max 3 mA) was almost linear. The auxiliary voltage was 15 mV. The circuit responded stably to smooth changes in the pick-up resistance;

Card 2/3

The use of nonlinear ...

S/880/61/000/079/004/011
E194/E455

the overall speed of operation and error depended mainly
on the indicating instrument used. There are 4 figures.

Card 3/3

LOSHNAROV, V., inzh.-tekhn. SHRAMKOV, G., komandir korabliya Il-14 (Tashkent);
KRASCHENKO, V., inzh. (Kiyev); OVCHARENKO, C., komandir vertoleta; OKUN',
I.; KRAVNIKOV, V., SIDROVSKIY, P.; LOZIKOV, E., aviatekhnik (Dushanbe)

Readers' letters. druzhd. av. 22 no.2:14-15,18 F '65. (MIRA 13:5)

1. Nachal'nik Kiyevskogo glavnogo rayonnogo dispatcherskogo punkta
(for OKUN'). 2. Nachal'nik sluzhby radiolokatsii i radionavigatsii,
g. L'vov (for Kravnikov). 3. Nachal'nik Mullerovskogo aeroporta (for
Sidrovskiy).

STRENGTH OF FLOW.

of flow in the water conduits of a Francis-type hydraulic turbine. Energomashinostroenie II no.3:16-19 Ag '65.

(Para 13:10)

BLEGA, O.; ENGEL'BERT, O.; YEZHKOVA, Z.; SHRAMKOVA, Ya.

Importance of autoimmunization reactions in the diagnosis of
diseases of the thyroid gland. Probl. endok. i gorm. 11 no.4:
21-25 J1-Ag '65. (MIRA 18:11)

1. 3-ya terapevticheskaya klinika, Praga.

J. A. 100, (E. 1).

Shtarkov, E. A. "On the Stability of Mineral Magnetism in Some rocks." Doklady
Akad. Nauk, S.S.S.R., Leningrad, Series A, No. 4, 1929, pp. 97-100.

SAME, Ye. 1.

Sarachov, E. I. "The Methods and Apparatus Used for Magnetic Measurements in the Scientific Research Laboratories of Germany." From the Report Regarding the Mission to Germany in 1.23-29. Izv. Vsesoiuznogo Nauchno-Issledov. Instituta Metrologii i Standardizatsii, Leningrad-Moscow, No. 1, 1932, pp. 3-66.

SHRAMKOV, Ye. G.

PROCESSES AND PROPERTIES INDEX

100 AND 4TH EDITIONS

538.081:621.317.4.081:621.317.2:389.6—82 645
Magnetic standards. SHRAMKOV, E. G. *Elek-
trichestvo* (No. 7) 42-51 (1946) In Russian.—A detailed
account of the creation by the Russian Institute for
Metrology of the first magnetic standards, based on
the c.g.s.m. system. A special laboratory, removed
from magnetic disturbances and built from non-
magnetic materials, houses three primary standards,
magnetic field potential, magnetic current and mag-
netic moment. Inside the laboratory the non-
uniformity of the terrestrial field is $\approx 6 \times 10^{-3}$ oersteds.
The standard of magnetic potential consists of a
Helmholtz inductor of specific dimensions resulting
in a max. departure from uniformity of $<0.001\%$.
The potential is calculated and also measured by
means of a test magnet suspended in the centre of the
field. The periods of oscillation of the magnet are

observed in the terrestrial field only, and in the
additional field of the coil energized by current.
The standard of magnetic current consists of a double
coil system, the first coil inducing a current in the
second coupled coil. The standard of magnetic
moment consists of a system of 4 rotational ellipsoids
of Co steel, specially heat treated and stabilized by
a.c. magnetization of decreasing potential, resulting
in an annual change of $0.02-0.04\%$. Several further
applications are described, such as the determination
of the horizontal component of the terrestrial field
and a more exact measurement of the absolute
amperes. A detailed description of the construction
technique and an analysis of the attainable accuracy
are given, also a block diagram illustrating the relations
between primary, secondary and working magnetic
standards.
A. L.

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A - 3.4.4 DETAILING LITERATURE CLASSIFICATION

100 AND 4TH EDITIONS

EX - 2

SHRAMKOV, Ye.G.

Errors in the measurement of magnetic characteristics of ferromagnetic materials. Trudy VNIIM no.1:55-71 '47. (MIRA 11:11)

(Magnetic measurements)

SHRAMKOV, Ye, G.

PA 164T21

USSR/Electricity - Terminology
Measuring Instruments

Jul 50

"Classification of Electric Measuring Instruments,"
Ye. G. Shramkov, Dr Tech Sci, Leningrad Polytech
Inst imeni Kalinin

"Elektrichestvo" No 7, pp 80-86

Stresses importance of establishing unified general terminology based on scientific classification of electric measuring instruments. Suggests system which would replace existing OST/VKS 8005 and OST 7656 standards which have been in force since 1935. Invites discussion and criticism of new proposals.

164T21

SHRAMKOV, YE. G.

SSSR/Electricity - Personalities

Aug 52

"Professor L. P. Neyman: on His 50th Birthday," A.A. Gorev, P.M. Goryunov, I.A. Zaytsev, A. M. Zaleskiy, N.D. Kamenskiy, N. P. Kostenko, A. G. Lur'ye, N. N. Mikhaylov, N.A. Shatelen, Ye. G. Shramkov

"Elektrich stvo" No 8, pp 92, 93

Reviews Neyman's scientific, administrative, and educational work, and organizational affiliations. Specifies following as principal fields of his scientific activity: investigation of phenomena in nonlinear elec circuits with iron; special problems of elec measurements; electromagnetic processes in converter installations for transmission of high-voltage dc power; and elec modeling of nonlinear processes in aerodynamic systems.

35THC

SHRAMKOV, Ye.G.

Establishing a magnetic standard in absolute units. Trudy VNIIM
no.10:5-42 '52. (MIRA 11:6)

(Magnetism—Standards)

USSR, No 2.

PA 243T29

USSR/Electricity - Scientists

Feb 53

"Professor A. M. Zalesskiy (In Connection with His 60th Birthday)," M. A. Shatelen, L. P. Newman, M. P. Kostenko, I. A. Zaytsev, Ye. G. Shramkov, M. D. Kamenskiy, B. I. Domanskiy, V. A. Belyakov, V. T. Renne, V. P. Andreyev, L. M. Piotrovskiy, B. N. Mikhalev, G. A. Kukekov, Yu. A. Sabinin

Elek-vo, No 2, p 94

Recounts chief events in professional life of Prof Aleksandr Mikhaylovich Zalesskiy, born 27 Nov 1892. Long active in field of high-voltage techniques, he has been Chairman of Administrative Board of VNITOE since 1945.

PA 248T29

AID P - 2946

Subject : USSR/Electricity

Card 1/1 Pub. 27 - 11/15

Authors : Shramkov, Ye. G., Doc. of Tech. Sci., Prof., V. O. Arutyunov, Doc. of Tech. Sci., Prof., A. M. Turichin, Kand. of Tech. Sci., Dotsent, and P. V. Novitskiy, Kand. of Tech. Sci., Dotsent

Title : Certain problems of electrical measurements

Periodical : Elektrichestvo, 8, 75-78, Ag 1955

Abstract : The authors discuss certain general problems of electrical measurements, in particular those rising with the rapid development of automation. Remote electrical measurements are one of the important elements of automation. The authors concentrate their attention on the achievements of Soviet technique and indicate the paths of future development in this field.

Institution : None

Submitted : Not given

SHRAMKOV, Ye. G.

112-3-6142

Translation from: Referativnyy Zhurnal, Elektrotekhnika,
Nr 3, 1957, p. 157 (USSR)

AUTHORS: Shramkov, Ye. G., Chernyshev, Ye. T.

TITLE: Translation of Magnetic Quantities from Standard to
Practical Units (Peredacha znacheniy magnitnykh yedinit
ot etalona rabochim meram)

PERIODICAL: Tr. Vses. n.-i in-ta metrol., 1956, Nr 29 (89),
pp. 5-17.

ABSTRACT: A checking circuit for magnetic measurements compares
the field intensity and magnetic flux of specimen
coils with practical standards, which in turn are com-
pared with electromagnetic standards (Shramkov, Ye. G.,
Tr. Vses. n.-i in-ta metrol., 1952, Nr 10 (70)). The
practical measurements are compared with the standard
measures. The most accurate method of comparing mag-
netic measurements is the zero or ballistic method, in
which the secondary windings of the coils being com-
pared are connected either according to one of the
bridge connection diagrams or as bucking coils in series

Card 1/2

SHRAMKOV, Ye. G.

112-3-6143

Translation from: Referativnyy Zhurnal, Elektrotehnika, 1957,
Nr 3, p. 157 (USSR)

AUTHORS: Shramkov, Ye. G., Sokolova, Ye. A.

TITLE: Reference Installation for Comparing Measurements of
Magnetic Flux, Magnetic Field Intensity and Exploring
Coils (Obraztsovaya ustanovka dlya slicheniya mer
magnitnogo potoka napryazhennosti magnitnogo polya i
izmeritel'nykh katushek)

PERIODICAL: Tr. Vses. n.-1 in-ta metrol., 1956, Nr 29 (89),
pp. 18-22

ABSTRACT: The basic circuit and construction of a stationary
measuring installation for comparing magnetic measure-
ments by the zero or ballistic method are described.
The technique of comparing measurements is explained,
and the results of comparisons are presented to show
that the error in translating the value of magnetic
units does not exceed 0.1%. On the basis of the sim-
plicity and ease of operation of the installation, it
is suggested that it be adopted widely in measurement
practice for checking magnetic measures.

G.L.G

Card 1/2

ШИРОКОВ, Ye. G.

ARUTYUNOV, V.O.; GORBATSEVICH, S.V.; ZUBRILIN, V.P.; KOLOSOV, A.K.; ROMANOVA, M.F.; TIKHODEYEV, P.M.; CHERNYSHEV, Ye.T.; SHIROKOV, K.P.; SHRAMKOV, Ye.G.; YANOVSKIY, B.M.

Mikhail Fedoseevich Malikov; on his 75th birthday. Izv. tekhn. no.2:
85-86 Mr-Ap '57. (MLRA 10:6)
(Malikov, Mikhail Fedoseevich, 1882-)

SMIRNOV, V.S.; USOV, S.V.; KOSTENKO, M.P.; HEYMAN, L.R.; ZAYTSEV, I.A.;
SHRAMKOV, Ye.G.; NESGOVOROVA, Ye.D.; PAL'IDR, Ye.A.

Professor L.M. Piotrovskii; on his 70th birthday and 45th anniversary of scientific and pedagogical activities. Elektrichestvo
no.2:93 F '57. (MLRA 10:3)
(Piotrovskii, Liudvik Mar'ianovich, 1886-)

S. H. RAMPKOV, E. G.

1015. STABILITY OF MEASURING INSTRUMENTS WITH
MAGNETO AND ALNICO

E. G. Rampkov, A. V. Mitkevich and N. B. Kovalev.
Elektroshchivo, 1957, No. 3, 62-7. In Russian.

New methods and instruments were devised to improve the sensitivity of the measurements; one of the new instruments was based on the magnetic-balance principle, the other on an astatic electrodynamic measuring system. Both were used, for control purposes, to measure the flux variations of a considerable number of magnet systems made of the materials investigated and subjected to various kinds of heat treatment, i.e. anneals at constant temperature and temperature cycles, respectively, and combinations of these kinds of treatment. A null method was used. The total number of systems tested was 84. Recommendations for production technology could be made which apply in part to systems similar to those investigated. Further work on other systems is desirable and would lead to more general conclusions.

B. F. Kraus

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ARUTYUNOV, V.P.; DOLINSEIY, Ye.F.; KOLOSOV, A.K.; MAKSIMOV, L.M.; ROMANOVA,
M.F.; RUDO, N.M.; CHECHURINA, Ye.N.; SHIROKOV, K.P.; SHRAMKOV,
Ye.C.; YANOVSKIY, B.N.

E.T. Chernyshev; 50th birthday anniversary and 30th anniversary of
scientific and pedagogic activities. Izv. tekhn. no. 3:91 My-Je '57.
(Chernyshev, Evgenii Titovich, 1907-) (MIRA 10:4)

115-5-39/44

AUTHOR: Shramkov, Ye.G.

TITLE: Session of the Advisory Committee for Electricity of the International Committee of Measures and Weights (Sessiya konsul'tativnogo komiteta po elektrichestvu Meshdunarodnogo komiteta mer i vesov)

PERIODICAL: "Izmeritel'naya Tekhnika", No 5, Sep-Oct 1957, pp 90-91 (USSR)

ABSTRACT: The article reviews the work of the session of the Advisory Committee for Electricity of the International Committee of Measures and Weights held in Paris in June 1957. The author states that of the 17 written reports presented at the session, 6 were from the USSR, and that VNIIM will work out a program for international comparisons of electric capacitance and inductiveness measures. The reports of the USA National Standard Committee, of the Japanese and the Canadian participants in the matters of producing the standard resistances and the materials for such resistances are referred to as deserving the most attention. The Soviet VNBS is stated to have been working - not knowing of the analogous research work at the USA National Standard Committee - on determination of the gyromagnetic relation, contemplating for the future to employ the protonic resonance method for absolute electric and

Card 1/2

SHIROKOV, K.P.; SHRAMKOV, Ye.G.

Metrological work in the field of electric and magnetic measurements.
Izm. tekhn. no.6:61-64 N-D '57. (MIRA 10:12)
(Electric measurements) (Magnetic measurements)

8(2)

SOV/112-59-1-1052

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 1, p 140 (USSR)

AUTHOR: Shramkov, Ye. G.

TITLE: Results of Research on Absolute Standards of Electrical Units at the Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii (All-Union Scientific-Research Institute of Metrology) imeni D. I. Mendeleev

PERIODICAL: Tr. Vses. n.-i. in-ta metrol., 1957, Nr 31 (81), pp 3-5

ABSTRACT: Projects of reproducing electric and magnetic absolute units carried out by the All-Union Scientific-Research Institute of Metrology over a period from 1938 to the present are listed. The projects include: (1) an absolute ampere standard in the form of a current balance; (2) an inductance standard in the form of four standard coils whose inductance can be computed from geometrical dimensions of the windings and spools; (3) measuring bridges for reproducing the absolute ohm through an inductance and frequency standards; (4) a measuring device that reproduces the absolute ohm through an estimated

Card 1/2

SOV/112-59-1-1052

Summarization of Projects of Absolute Standards of Electrical Units at the

mutual inductance and frequency. A special comparer (potentiometer) is mentioned that serves for comparing the normal cells by connecting them in opposition with an auxiliary normal cell. Suggestions made by VNIIM before the Konsul'tativnyy komitet po elektrichestvu i fotometrii (Consulting Committee on Electricity and Photometry) on the basis of the above projects are listed. Also see Referativnyy zhurnal, Elektrotekhnika, 1958, 35667, 35668, and 37950.

M.A.B.

Card 2/2

"Die genaue Messung höchster Gleichströme mittels Anwendung der magnetischen Kernresonanz"

report presented at the

Intl. Measurements Conference (IMEKO) Budapest, 24-30 November ¹⁹⁵⁸~~1960~~

MIKHAYLOV, M.M.; KOSTENKO, M.P.; NEYMAN, L.R.; TARBYEV, B.M.; PRIVEZENTSEV,
V.A.; ZAYTSEV, I.A.; SHRAMKOV, Ye.G.; KORITSKIY, Yu.V.

Professor V.T. Renne; on his 50th birthday. Elektrichestvo no.7:
92 J1 '58. (MIRA 11:8)

(Renne, Vladimir Tikhonovich, 1908-)

SHARPIK, Y. G.

SOV/144-58-9-18/18

AUTHOR: Gikis, A. P., Candidate of Technical Sciences, Docent
TITLE: Inter-University Scientific Conference on Electric Measuring Instruments and Technical Means of Automation (Mezhvuzovskaya nauchnaya konferentsiya po elektrozmeritel'nym priboram i tekhnicheskim sredstvam avtomatiki)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Elektromekhanika, 1958, Nr 9, pp 130-135 (USSR)

ABSTRACT: The conference was held at the Leningradskiy elektrotekhnicheskii institut imeni V. I. Ul'yanova (Lenina) (Leningrad Electro-technical Institute imeni V. I. Ul'yanov (Lenin)) on November 11-15, 1958. The representatives of eleven higher teaching establishments and three research institutes participated and a large number of specialists of various industrial undertakings were present.

Professor Ye. G. Shrankov and Junior Scientific worker R. A. Spektor (Leningrad Polytechnical Institute imeni M. I. Kalinin) presented the paper "Measurement

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of large d.c. currents by the method of nuclear magnetic resonance", which permits measuring with an error below 0.1%; the built experimental instrument was suitable for measuring currents up to 35 000 A with an error not exceeding 0.05%.

Professor N. N. Shumilovskiy (Moscow Lenin Order Power Institute) presented the paper "Basic trends of development of radio-active methods of automatic control of production processes"; he dealt with sources of metering errors and methods of improving the accuracy.

Professor Ya. Z. Tsypkin (Institute of Automatics and Mechanics, Ac.Sc. USSR) presented the paper "On certain features and potentialities of impulse automatic systems". He dealt particularly with "compensation" delay in impulse automatic systems, impulse extremal and self-setting systems and basic trends in the development of impulse circuits.

Card 9/13

SHRAMKOV, Ye G.

AUTHOR: Bogdanovskiy, P.S., Engineer.

110-3-18/22

TITLE: A Discussion on Questions of Electrical Instrument Construction (Diskussiya vo voprosam elektropriborostroyeniya)

PERIODICAL: Vestnik Elektromyshlennosti, 1958, Vol.29, No.3, pp. 70 - 75 (USSR).

ABSTRACT: On December 10 - 13, 1957; there was held in Leningrad the first scientific technical discussion on electrical instrument construction, organized by the Leningrad Scientific Technical Society of the Instrument Industry (Leningradskoye nauchno-tekhnicheskoye obshchestvo priborostroitel'noy promyshlennosti) together with the Technical Science Division of the Ac.Sc. USSR (Otdeleniye tekhnicheskikh nauk AN SSSR), Committee of Standards, Weights and Measuring Instruments of the Council of Ministers of the USSR (Komitet standartov, mer i izmeritel'nykh priborov pri Sovete Ministrov SSSR) and the Instrument Construction Directorate of the Leningrad Council of National Economy (Upravleniye priborostroyeniya Leningradskogo sovmarkhoza).

The following were the main themes of discussion: 1) Various quality criteria of measuring mechanisms; 2) The application of taut-wire suspensions in measuring mechanisms, methods of design, methods of evaluating quality; 3) the evaluation and

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110-3-18/22

Discussions on Questions of Electrical Instrument Construction

the following: 1) errors in instruments; 4) The field of scientific and design principles of automatic measuring instruments; 5) Current trends in the theory and design principles of instruments; 6) General trends of standardisation in instruments. The meeting was attended by 430 representatives of factories, research institutes and educational establishments of Moscow, Leningrad, Kiev and other towns. There were representatives from Bulgaria, East Germany and Czechoslovakia. The introductory address was given by Prof. Ye.G. Shirokov, (VNIIE) who reviewed instrument design and manufacture. The main object of the meeting was a thorough consideration of a small number of questions mainly concerned with direct-reading instruments and automatic measuring devices to determine the trend of work for the next seven years and to formulate basic recommendations for the future plan of development of electrical instrument manufacture.

Speaking on the first theme, Engineer P.P. Usatov (of the VNIIE) criticised the classic definition of quality factor and proposed a new expression. Prof. M.M. Reshetovskiy (VNIIE) considered that quality factor was useful and suggested for also for them. Others taking part in the discussion were

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SHRAMKOV, Ye.G.; GORBATSEVICH, S.V.; KOLOSOV, A.K.; DROTKOV, I.N.; ROZHDESTVENSKAYA,
T.B.; SHIROKOV, K.P.; CHERNYSHEV, Ye.T.; YANOVSKIY, B.M.

Metrological activities in the field of electric and magnetic measurements. Trudy.VNIIM no.33:60-93 '58. (MIRA 11:11)

1. Rukovoditel' otдела elektricheskikh i magnitnykh izmereniy
Vsesoyuznogo nauchno-issledovatel'skogo instituta metrologii imeni
D.I. Mendeleeva (for Shramkov).
(Electric measurements) (Magnetic measurements)

8(2), 9(6)

AUTHOR:

Anisimov, V. I., Engineer

SOV/119-59-3-13/15

TITLE:

The Inter-university Scientific Conference
on Electrical Measuring Instruments and on the Technical
Means of Automation (Mezhvuzovskaya nauchnaya
konferentsiya po elektroizmeritel'nyy priboram i
tekhnicheskim sredstvam avtomatiki)

PERIODICAL:

Priborostroyeniye, 1959, Nr 3, pp 30-31 (USSR)

ABSTRACT:

This Conference was held at the Leningradskiy elektrotekhnicheskiy
institut im. V. I. Ul'yanova (Lenina) (Leningrad Institute
of Electrical Engineering imeni V. I. Ul'yanov (Lenin)) in
November 1958. It was attended by more than 500 representatives
of universities, scientific research institutes, of the OKB,
the SKB (Special Design Office), of industries and other
organizations. More than 30 lectures were delivered in
the meetings of this Conference. In opening the conference
N. P. Boroditskiy underlined the outstanding importance of automation
and of measuring technique for the development of national
economy. N. N. Shumilovskiy in his lecture reported on
"The Trends in the Development of Methods of Radioactive
Control of Production Data" and outlined the extensive

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The Inter-university Scientific Conference on
Electrical Measuring Instruments and on the Technical
Means of Automation

SOV/119-59-3-13/15

possibilities of using radioactive methods in such control. Ye. G. Shramkov and S. A. Spektor reported on a new method of measuring heavy direct currents with the help of the nuclear magnetic resonance. M. A. Rozenblat investigated problems of the application of magnetic amplifiers in automation and in measuring technique. A. V. Fateyev reported on the present-day state on the prospects of automatic control technique. Ya. Z. Tsypkin investigated some peculiar features of and the prospects offered by automatic pulse systems. The lecture by N. G. Boldyrev dealt with problems of stability of discrete automatic systems. V. B. Ushakov discussed the main trends in the development of mathematical analog computers and of computers designed for industrial use. The report by V. S. Ryabyshkin deals with an electronic analog correlator for the calculation of correlation functions in the investigation of winds in the ionosphere. R. I. Yurgenson reported on the most important methods, which guarantee both an active and passive freedom from disturbances in

Card 2/5

The Inter-university Scientific Conference on
Electrical Measuring Instruments and on the Technical
Means of Automation

SOV/119-59-3-13/15

discrete selective systems. Ya. V. Novosel'tsev discussed problems of averaging, differentiation, and balancing of time-dependent functions which can be represented by electric signals. V. P. Skuridin investigated new computing devices with polarized relays. A. V. Fremke and Ye. M. Dushin reported on instrument transformers for automatic instruments with automatic recording. V. B. Ushakov and N. N. Kopay-Gora reported on a computer for the automatic centralized control of production specifications. M. M. Fetisov discussed fundamental problems of the theory of automatic measuring instruments with an inverse conversion for the measurement of non-electric quantities. Ye. I. Tenyakov dealt with problems of the construction of automatic d. c. potentiometers with high accuracy. D. I. Malov discussed a high-precision automatic d. c. bridge for digital computations. The participants in the Congress listed below discussed the following subjects (which, however, are not given by the exact wording of the titles):
V. A. Ivantsov: The planning of measuring elements for

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The Inter-university Scientific Conference on
Electrical Measuring Instruments and on the Technical
Means of Automation

SOV/119-59-3-13/15

accurate automatic quotient-type meters in digital computations.
R. R. Kharchenko: Methods of determining the dynamic errors
of a magnetic oscilloscope by simulation. P. P. Ornatskiy:
Problems in measuring electric quantities at extremely low
frequencies by electrical indicating instruments of various
systems. L. F. Kulikovskiy: Novel types of a. c. compensators.
A. S. Rozenkrants: Automatic bridges and a. c. compensators
suited for the control of the parameters of condensers in
series production. L. I. Stolov: Some characteristics of
midget induction motors which can be used in measuring
technique and automation. D. A. Borodayev: Ultrasonic
pressure- and liquid level gages. Yu. A. Skripnik: The
circuitry of a phase-sensitive commutation indicator for
a. c. semi-equilibrium bridges. N. F. Suvid: The application
of instruments with magnetic bridges, which permit a
considerable simplification of the design of the apparatus
and the circuitry used in the measurement of non-electric
quantities. V. A. Ferents: Method of increasing the
sensitivity of oxygen gas analyzers. P. V. Novitskiy:

Card 4/5

The Inter-university Scientific Conference on
Electrical Measuring Instruments and on the Technical
Means of Automation

SOV/119-59-3-13/15

Design of apparatus for measuring vibration quantities.
V. V. Pasyukov: Main types of non-linear semiconductor
resistors and possibilities of their application to
circuitry in automation and measuring technique. G. N.
Novopashenny: Development of measuring amplifiers with
semiconductor triodes. Ya. V. Novosel'tsev, N. A. Smirnov,
Ye. Ye. Afanas'yev, Ye. P. Ugryumov: Precision semiconductor
frequency meter operating according to the pulse-counting
principle. P. G. Nikitin and A. Bezukladnikov: Methods of
measuring the magnetic field strength by means of bismuth
resistors and transducers operating on the Hall effect
principle. A resolution was adopted by the closing plenary
meeting of the Conference, which indicates ways of
improving and coordinating scientific research work in the
field of automation, electric measuring- and computing
technique.

Card 5/5

PHASE I BOOK EXPLOITATION

SOV/4407

Akademiyu nauk Ukrainskoy SSR. Institut elektrotehniki

Voprosy obshchego elektropriborostroyeniya (Overall Problems of the Electric Instrument Industry) Kiyev, 1960. 262 p. 3,000 copies printed.

Additional Sponsoring Agency: Nauchno-tehnicheskoye obshchestvo priborostroitel'noy promyshlennosti. Ukrainskoye respublikanskoye pravleniye.

Editorial Board: A. D. Nesterenko, Corresponding Member, Academy of Sciences Ukrainskaya SSR (Resp. Ed.), M. I. Levin, Doctor of Technical Sciences, P. P. Ornatskiy, Candidate of Technical Sciences, V. F. Petrochenko, Candidate of Technical Sciences, A. F. Gorodovski, Engineer, S. Sh. Zaslavskiy, Engineer, and B. A. Seliber; Ed. of Publishing House: B. A. Kazantsev; Tech. Ed.: M. I. Yefimova.

PURPOSE: This book is intended for technical personnel working in the field of electric measurement techniques, in electrical instrument plants, in laboratories of electric power systems and in electric measurement laboratories of plants.

Card 1/12

Overall Problems of the Electric (Cont.)

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COVERAGE: This is a collection of reports presented at a conference on the overall development of the Soviet electrical instrument industry held in Kiyev on October 23-27, 1956. The conference was convened by the Institut elektrotekhniki AN USSR (Institute of Electrical Engineering, Academy of Sciences UkrSSR) and the Ukrainskoye respublikanskoye pravleniye NTO priborostroitel'noy promyshlennosti (Ukrainian Republic Administration of NTO of the Instrument-making Industry). Problems relating to electrical instrument-making as a whole (reports by A. D. Nesterenko, P. P. Ornatskiy, Ya. S. Averbukh, Ye. G. Shramkov) were discussed, as well as problems relating to the development of reference instruments (Ya. S. Averbukh, I. K. Khodeyev), the automation of electric-measuring circuits (A. Ya. Shramkov, L. Ya. Mizyuk) and to the theory and practice of magnetic measurements (N. N. Shol'ts, G. L. Gornshcheyn). Attending the conference were workers of scientific research institutes and schools of higher education, along with representatives of the main electric instrument plants ("Vibrator" in Leningrad, "Tochelektropribor" in Kiyev, "Omelektrotochpribor" in Omsk, ZIP in Krasnodar and others) and of various electric power systems. No personalities are mentioned. References accompany ten of the reports.

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Overall Problems of the Electric (Cont.)

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TABLE OF CONTENTS:

Foreword

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Nesterenko, A. D. Present State of the Electric Instrument Industry, and Principal Problems Facing Industrial and Scientific Workers in Their Task of Developing and Introducing Novel Electric-Measuring Instruments Into Practice

5

The author enumerates the following trends in the development of the Soviet electrical instrument industry: improvement of instrument characteristics; increase of measurement limits and of the number of values measured with a single meter; new instrument specifications, especially for instruments operating in automatic control circuits; automation of measuring processes and transition to automatic instruments. He recommends various means for improving existing conditions, in particular the standardization of terminology.

Card 3/12

ARUTYUNOV, V.O.; GORBATSEVICH, S.V.; SHRAMKOV, Ye.G.; BURDUN, G.D.;
KOLOSOV, A.K.

M.F.Malikov; obituary. Izv.tekh. no.4:61 Ap '60.
(MIRA 13:8)

(Malikov, Mikhail Fedoseevich, 1882-1960)

NEYMAN, L.R., prof.; SHRAMKOV, Ye.G., prof., doktor tekhn.nauk

In regard to questions touched by Professor L.B.Slepian in the
article "Shortcomings of All-Union State Standard 8033-56."
Elektrichestvo no.7:68 JI '60. (MIRA 13:8)

1. Leningradskiy politekhnicheskij institut im. Kalinina.
2. Chlen-korrespondent AN SSSR (for Neyman).
(Electric units--Standards) (Magnetism--Standards)

S/115/60/000/008/013/013
B019/B063

AUTHORS: Arutyunov, V. O., Kolosov, A. K., Chernyshev, Ye. T.,
Shramkov, Ye. G., Yanovskiy, B. M.

TITLE: A. N. Boyko (Deceased)

PERIODICAL: Izmeritel'naya tekhnika, 1960, No. 8, p. 63

TEXT: Aleksey Nikitich Boyko, Senior Collaborator of the Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii im. D. I. Mendeleyeva (All-Union Scientific Research Institute of Metrology imeni D. I. Mendeleyev) died on May 20, 1960. The son of a farmer he was born in 1885, and he completed his studies at Peterburg Politekhnicheskiy institut (Peterburg Polytechnic Institute) in 1914. He worked at the Fiziko-tekhnicheskiy institut (Institute of Physics and Technology), from 1918 onward at the Glavnaya palata mer i vesov (Main Bureau of Weights and Measures), and finally at the All-Union Scientific Research Institute of Metrology. During the years of development of the Soviet instrument-building industry he was in charge of the production and control of permanent magnets at the factories imeni Koznitskiy, Krasnaya Zarya,

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A. N. Boyko (Deceased)

S/115/60/000/008/013/013
B019/B063

Krasnyy Oktyabr', and Elektrostal'. He contributed to the development of the theory of permanent magnetic fields, and investigated photocells and rare gases. Two helium laboratories in Leningrad and an actinometric laboratory at the VNIIM were established on his initiative. He carried out investigations on objective methods of measuring ultraviolet radiation and took part in the planning of the Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy (All-Union Scientific Research Institute of Physical, Technical, and Radiotechnical Measurements). He designed 28 instruments and published 30 scientific articles.

Card 2/2

CHERNYSHEV, Ye.T.; SHRAMKOV, Ye.G.

Principles underlying the construction of different systems for
the transfer of magnetic unit values. Trudy inst. Kopp, stand.,
mer i izm. prib. no.43:5-10 '60. (MIRA 14:7)
(Magnetic measurements)

SHRAMKOV, Ye. G.

"On group 20 (instruments) of the international electrotechnical dictionary"

Paper presented at the Second International Measurements and Instruments Conference, (IMEKO), Budapest, 25 June - 1 July 1961.

SHEVAKOV, Ye.G.; NOVITSKIY, P.V.; FETISOV, M.M.; ZORIN, D.I.

Concerning the structure and some fundamental characteristics
of present-day electric measuring devices. Elektrichestvo
no.3:20-25 Ag '62. (MIRA 15:7)

1. Leningradskiy politekhnicheskii institut imeni Kalinina.
(Electric measurements)

BESSONOV, L.A.; DOMANSKIY, B.I.; DROZDOV, N.G.; D'YACHENKO, N.Kh.;
ZHEKULIN, L.A.; ZAYTSEV, I.A.; ZALESKIY, A.M.; KAMENSKIY, M.D.;
KOSTENKO, M.P.; LEBEDEV, A.A.; LOMONOSOV, V.Yu.; MITKEVICH, A.V.;
SMIRNOV, V.S.; TOLSTOV, Yu.G.; USOV, S.V.; SHRAMKOV, Ye.G.

L.R. Neiman; on his 60th birthday and the 35th anniversary of
his educational work. Elektrichestvo no.6:93-94 Je '62. (MIRA 15:6)
(Neiman, Leonid Robertovich, 1902-)

ZORIN, D.I., dots., kand. tekhn. nauk; MITKEVICH, A.V., dots., kand. tekhn. nauk; SHMAKOV, E.M., ass.; SHRAMKOV, Ye.G., prof., doktor tekhn. nauk; ASHKENAZI, E.L., red.; AKSEL'ROD, I.Sh., tekhn. red.

[International electrotechnical vocabulary. Group 20: Scientific and industrial measuring instruments] Mezhdunarodnyi elektro-tekhnicheskii slovar'; gruppa 20: Laboratornye i tekhnicheskije izmeritel'nye pribory. Izd.2. Moskva, Glav.red.inostr. nauchno-tekhn. slovarei Fizmatgiza, 1962. 225 p. (MIRA 16:1)

1. International Electrotechnical Commission.
(English language--Dictionaries--Polyglot)
(Electric engineering--Dictionaries)